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REMARKS

- Claims 1 to 18 were pending in this application
- Claims 9 through 18 have been withdrawn herein
- Claims 1 and 5 having been amended herein
- Claims 19 through 24 have been added herein
- Claims 1 to 8 and 19 to 24 will be pending upon entry of this amendment
- Claims 1, 5, 19, and 22 are the only pending independent claims

In view of the foregoing amendments and the following remarks, Applicants request favorable reconsideration and allowance of the application.

A. Election Affirmation

Applicants affirm the election made by Mr. Robert W. Mulcahy on December 15, 2005 during a telephone conversation to prosecute the invention of Group I, Claims 1-8.

B. Section 102 Rejections

The Office Action rejects Claims 1, 2 and 4 as anticipated by U.S. Patent No. 5,379,785 (Ohmori) and by U.S. Patent No. 6,026,832 (Sato). In response to the rejection, Applicants have amended Claim 1 to recite, "a reflector mountable to one of the vertical sidewalls, positioned at a side of the substrate, and adapted to reflect the sonic energy away from a central region of the substrate and toward an edge of the substrate so as to provide a 100% cleaning duty cycle to the edge of the substrate". (Emphasis added). The amendment to Claim 1 is

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supported by FIG. 1. Such a reflector may provide additional sonic energy to a substrate edge, thereby improving substrate edge cleaning in particular. Neither Ohmori nor Sato appear to disclose a reflector adapted to reflect sonic energy toward an edge and away from a central region of the substrate as recited by amended Claim 1. In contrast, the figures cited by the Office Action to reject Claims 1, 2 and 4 appear to show sonic energy directed toward a major surface or face of a substrate. Consequently, Applicants respectfully submit that Claim 1 and Claims 2 and 4, which depend therefrom, are allowable over each of Ohmori and Sato.

Original Claim 4 recites that "the reflector reflects the sonic energy at an angle that corresponds to an angle of an edge bevel of the substrate". The Office Action states Claim 4 is anticipated by Ohmori or Sato without citing to any portion of either reference that discloses such a feature. Applicants respectfully submit that neither Ohmori nor Sato disclose a reflector that "reflects the sonic energy at an angle that corresponds to an angle of an edge bevel of the substrate", and therefore, new Claim 19, which is Claim 4 rewritten in independent form including all of the limitations of the base claim and any intervening claims, is allowable over each of Ohmori and Sato.

In addition, Applicants note that while the references involve reflecting energy, the references do not appear to teach or suggest a reflector mountable to one of the vertical sidewalls, as recited in amended Claim 1. This feature, which is supported by Applicants' FIG. 1 (and the associated text of Applicants' specification), does not appear to be disclosed or even suggested by any of the

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relied upon references. This feature, which allows the reflector to direct the sonic energy back at the edge of the substrate and away from the center of the substrate, also allows various reflectors of different shapes to be inexpensively added to easily manufactured vertical walled tanks. Thus, for this additional reason, Applicants assert that, as amended, Applicants' claims are patentable over the relied upon references.

C. Section 103 Rejections

The Office Action rejects Claims 5, 6 and 8 as unpatentable over Ohmori or Sato in view of U.S. Patent No. 5,090,432 (Bran). The Office Action appears to rely on the proposition that Ohmori or Sato discloses a reflector adapted to reflect sonic energy toward an edge of the substrate. In response to the rejection, Applicants have amended Claim 5 to recite "a first reflector ~~mounted~~ mountable on a first vertical sidewall wall of the tank on ~~and facing~~ a first side of the substrate and adapted to reflect the sonic energy away from a central region of the substrate and toward an edge of the substrate" and "a second reflector ~~mounted~~ mountable on a second vertical sidewall wall of the tank on ~~and facing~~ a second side of the substrate and adapted to reflect the sonic energy away from a central region of the substrate and toward the edge of the substrate." (Emphases added). Similar to the amendment to Claim 1, the amendment to Claim 5 is supported by FIG. 1. Neither Ohmori nor Sato appear to disclose or suggest reflectors adapted to reflect sonic energy toward an edge and away from a central region of the substrate as recited in amended Claim 5. Bran does not overcome the deficiencies

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of Ohmori or Sato. Consequently, Applicants respectfully submit Ohmori, Sato and/or Bran do not disclose or suggest "a first reflector mountable on a first vertical sidewall of the tank on a first side of the substrate and adapted to reflect the sonic energy away from a central region of the substrate and toward an edge of the substrate" and "a second reflector mountable on a second vertical sidewall of the tank on a second side of the substrate and adapted to reflect the sonic energy away from a central region of the substrate and toward the edge of the substrate." Therefore, Applicants submit that Claim 5 and Claims 6 and 8, which depend therefrom, are allowable over Ohmori or Sato in view of Bran.

Further, original Claim 6 requires that "the reflectors reflect the sonic energy at angles that correspond to angles of an edge bevel of the substrate". The Office Action states Claim 6 is unpatentable over Ohmori or Sato in view of Bran without citing any portion of these references that discloses such a feature. Applicants respectfully submit that Ohmori, Sato and/or Bran do not disclose or suggest reflectors that "reflect the sonic energy at angles that correspond to angles of an edge bevel of the substrate", and therefore, that new Claim 20, which is Claim 6 rewritten in independent form including all of the limitations of the base claim and any intervening claims, is allowable over Ohmori or Sato in view of Bran.

The Office Action rejects Claim 3 as unpatentable over Ohmori or Sato (as applied to Claim 1) in view of U.S. Patent No. 6,311,702 (Fishkin). As stated above, Claim 1 has been amended. Neither Ohmori nor Sato appear to disclose or suggest a reflector adapted to reflect sonic

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energy toward an edge and away from a central region of the substrate as required by amended Claim 1. Further, Bran does not overcome the deficiencies of Ohmori or Sato. Consequently, Applicants respectfully submit Ohmori, Sato and/or Fishkin do not disclose or suggest a reflector adapted to reflect sonic energy toward an edge and away from a central region of the substrate, and therefore, submit Claim 3 is allowable.

The Office Action rejects Claim 7 as unpatentable over Ohmori or Sato in view of Bran (as applied to Claim 5) and further in view of Fishkin. As stated above, Claim 5 has been amended. Neither Ohmori nor Sato appear to disclose or suggest reflectors adapted to reflect sonic energy toward an edge and away from a central region of the substrate as required by amended Claim 5. Further, neither Bran nor Fishkin overcomes the deficiencies of Ohmori or Sato. Consequently, Applicants respectfully submit Ohmori, Sato, Bran and/or Fishkin do not disclose or suggest "a first reflector mountable on a first vertical sidewall of the tank on a first side of the substrate and adapted to reflect the sonic energy away from a central region of the substrate and toward an edge of the substrate" and "a second reflector mountable on a second vertical sidewall of the tank on a second side of the substrate and adapted to reflect the sonic energy away from a central region of the substrate and toward the edge of the substrate." Therefore, Applicants submit Claim 7 is allowable.

In addition, Applicants note that while the references involve reflecting energy, the references do not appear to teach or suggest reflectors mountable to the vertical sidewalls, as recited in amended Claim 5 (and

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similarly recited in amended Claim 1). The new independent claims (Claims 19 and 22) also include this feature. This feature, which is supported by Applicants' FIG. 1 (and the associated text of Applicants' specification), does not appear to be disclosed or even suggested by any of the relied upon references. As explained above, this feature, which allows the reflectors to direct the sonic energy back at the edge of the substrate and away from the center of the substrate, also allows various reflectors of different shapes to be inexpensively added to easily manufactured vertical walled tanks. Thus, for this additional reason, Applicants assert that, as amended, Applicants' claims are patentable over the relied upon references.

New dependant claims 20, 21, 23, and 24 each recite additional features not disclosed in the references. Specifically, Claims 20 and 23 recite that the reflectors may be interchanged with differently shaped reflectors. Claims 21 and 24 recite that the interchangeable reflectors are curved to focus the sonic energy on the edge of the substrate. Support for these new claims may be found at least in Applicants' FIG. 5 and the associated text on page 6, lines 10 to 19 of Applicants' specification.

D. Conclusion

For the above reasons, Applicants respectfully submit that independent Claims 1, 5, 19 and 20 are patentable over the cited references. Claims 2-4 and 6-8, which depend therefrom, are submitted as being allowable for at least the same reasons. Passage to issue is respectfully solicited.

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Please charge Deposit Account No. 04-1696 for the new claim fees and any required fee for any required petition for extension of time to respond. Applicants do not believe any other fees are due regarding this amendment. If any fees are required, however, please charge Deposit Account No. 04-1696. Applicants encourage the Examiner to telephone Applicants' attorney should any issues remain.

Respectfully Submitted,



Steven M. Santisi, Esq.
Registration No. 40,157
Dugan & Dugan, PC
Attorneys for Applicants
(914) 332-9081

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Tarrytown, New York